

REACTIONS AT 10 Td

6.5%	$O_2 + e^- \rightarrow$	$O_2(v=1) + e^-$
3%	$O_2 + e^- \rightarrow$	$O_2(v=2) + e^-$
2%	$O_2 + e^- \rightarrow$	$O_2(v=3) + e^-$
$O_2^1\Delta$ 48.5%	$O_2 + e^- \rightarrow$	$O_2(0.98) + e^-$
$\sim 13\%$	$O_2 + e^- \rightarrow$	$O_2(1.0) + e^-$
$O_2^1\Sigma$ $\sim 24.5\%$	$O_2 + e^- \rightarrow$	$O_2(1.63) + e^-$
6%	$O_2 + e^- \rightarrow$	$O_2(4.8) + e^-$
2%	$O_2 + e^- \rightarrow$	$O_2(6.1) + e^-$
	$O_2 + e^- \rightarrow$	$O_2(8.4) + e^-$
$\sim 2\%$	$O_2 + e^- \rightarrow$	$O + O^-$
$\sim 1\%$	$O_2 + e^- \rightarrow$	$O + O(+) + e^-$
5%	$O_2 + e^- \rightarrow$	$O_2 + e^- + e^-$
ELASTIC + ROTATIONAL		

FIG-1

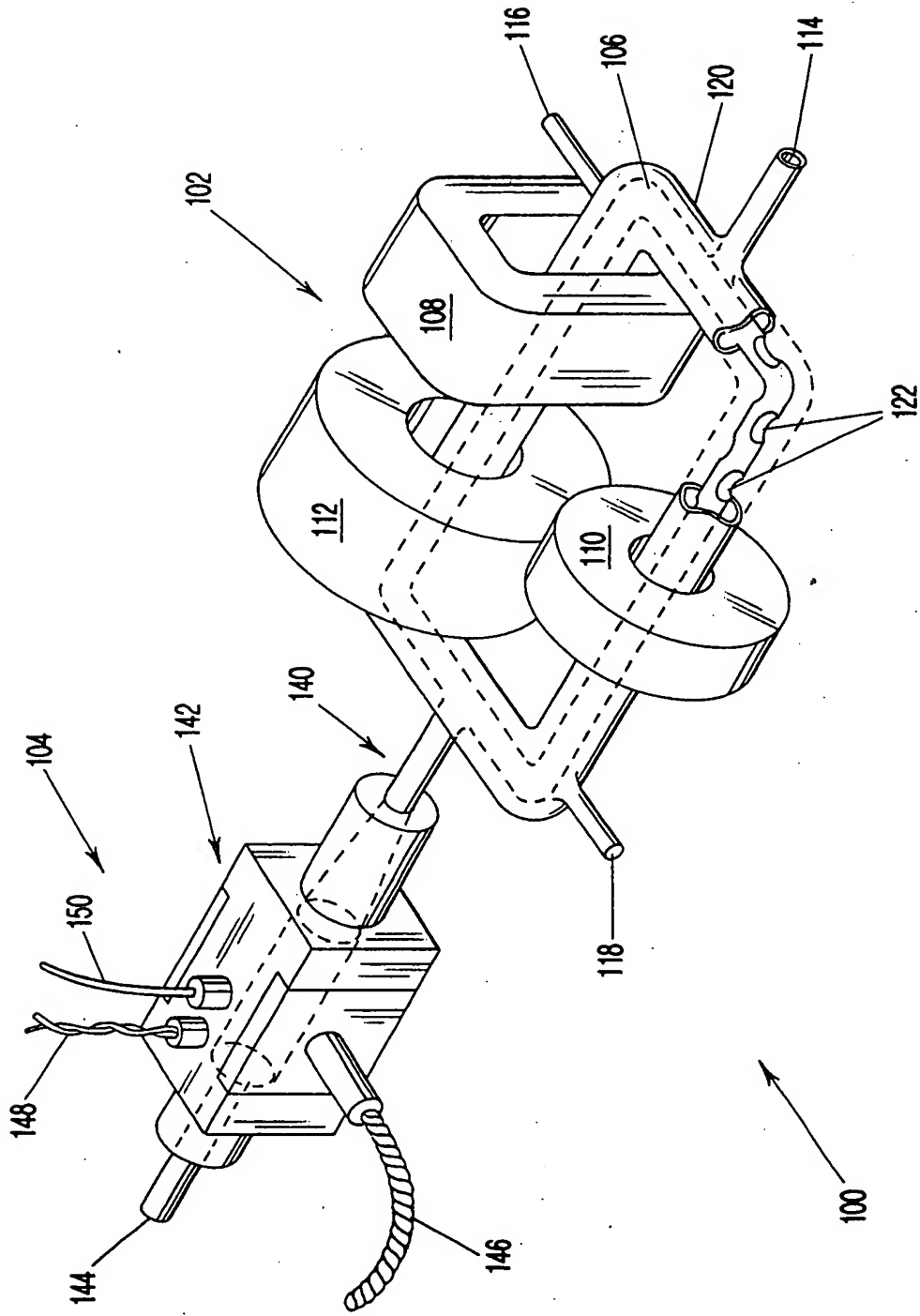


FIG-2

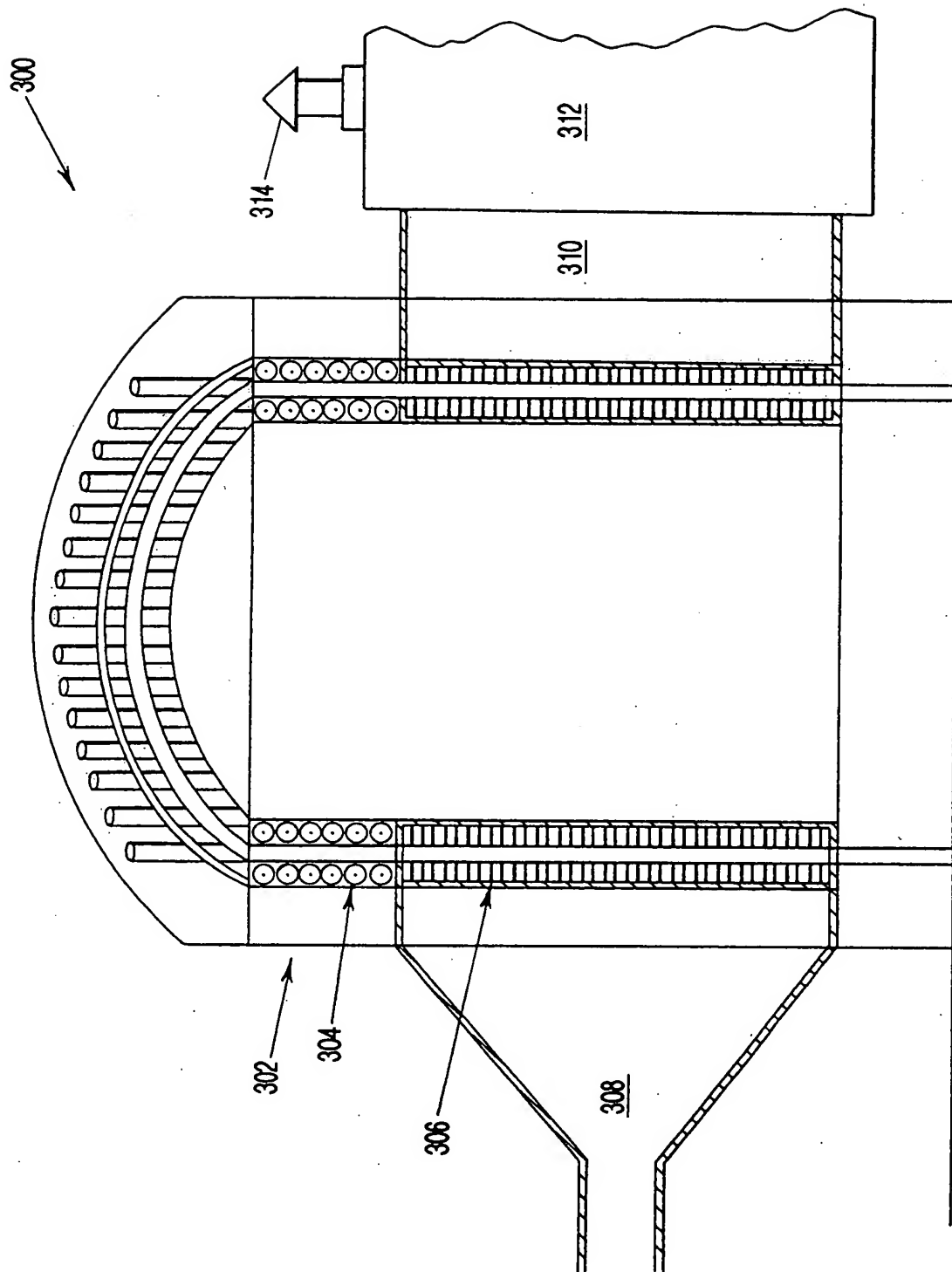


FIG-4

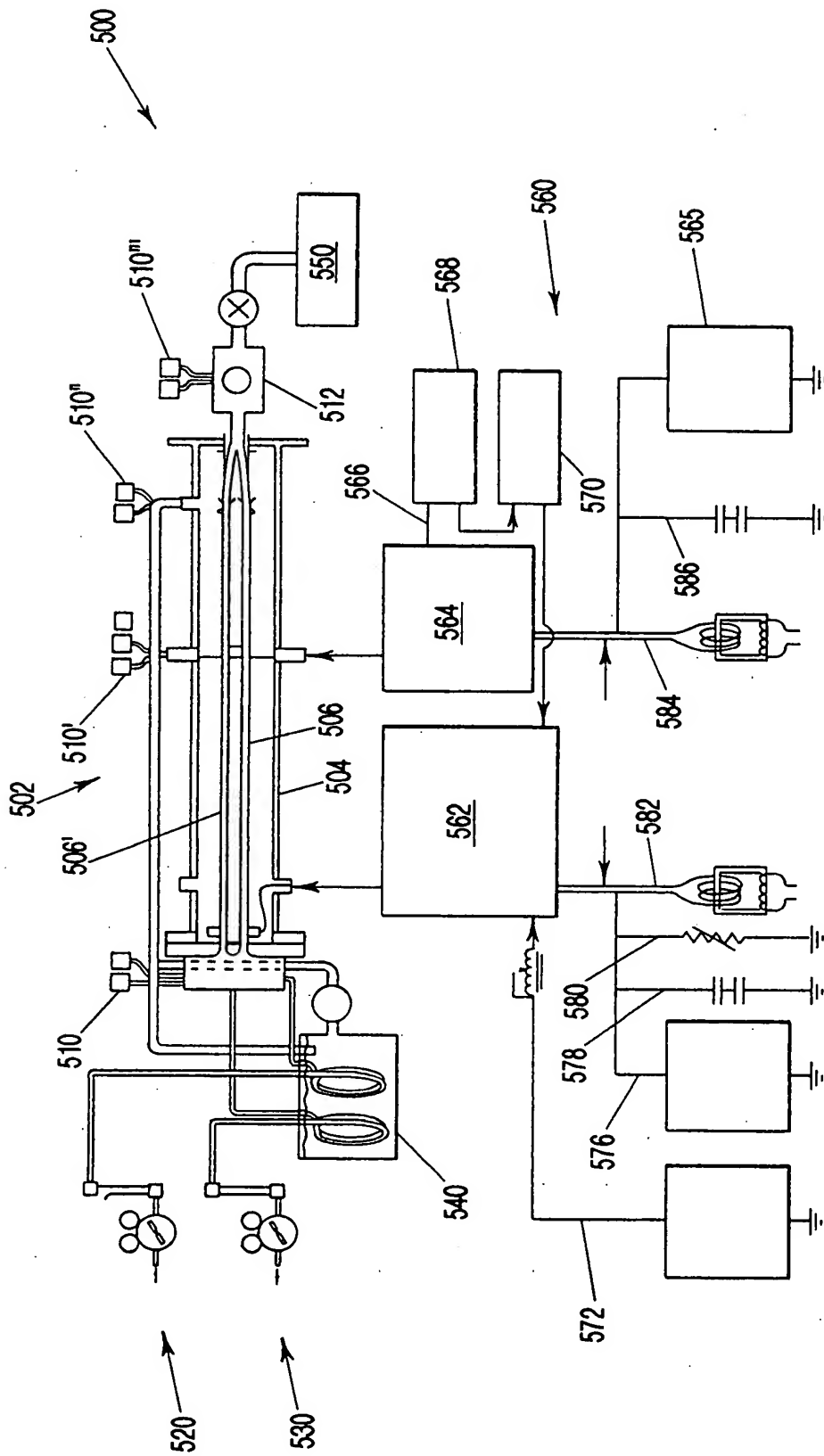


FIG-5

2072220 03099001

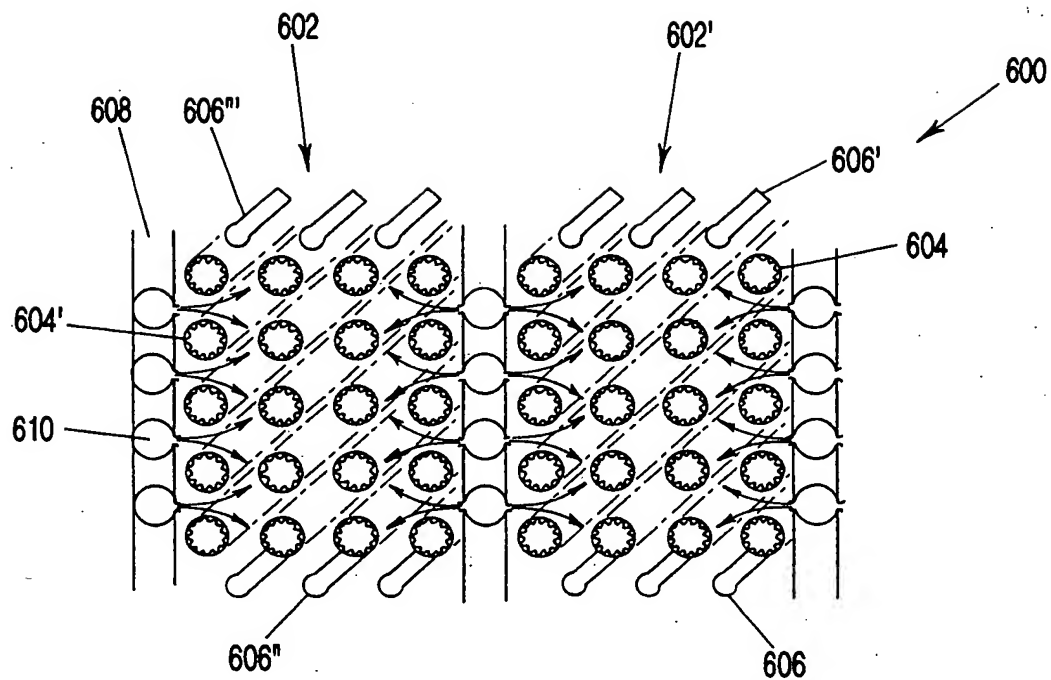


FIG-6a

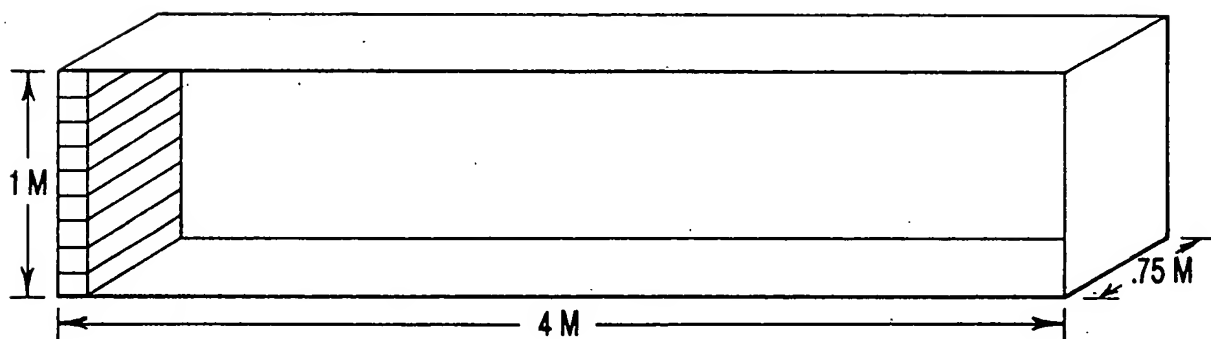
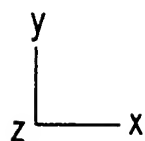
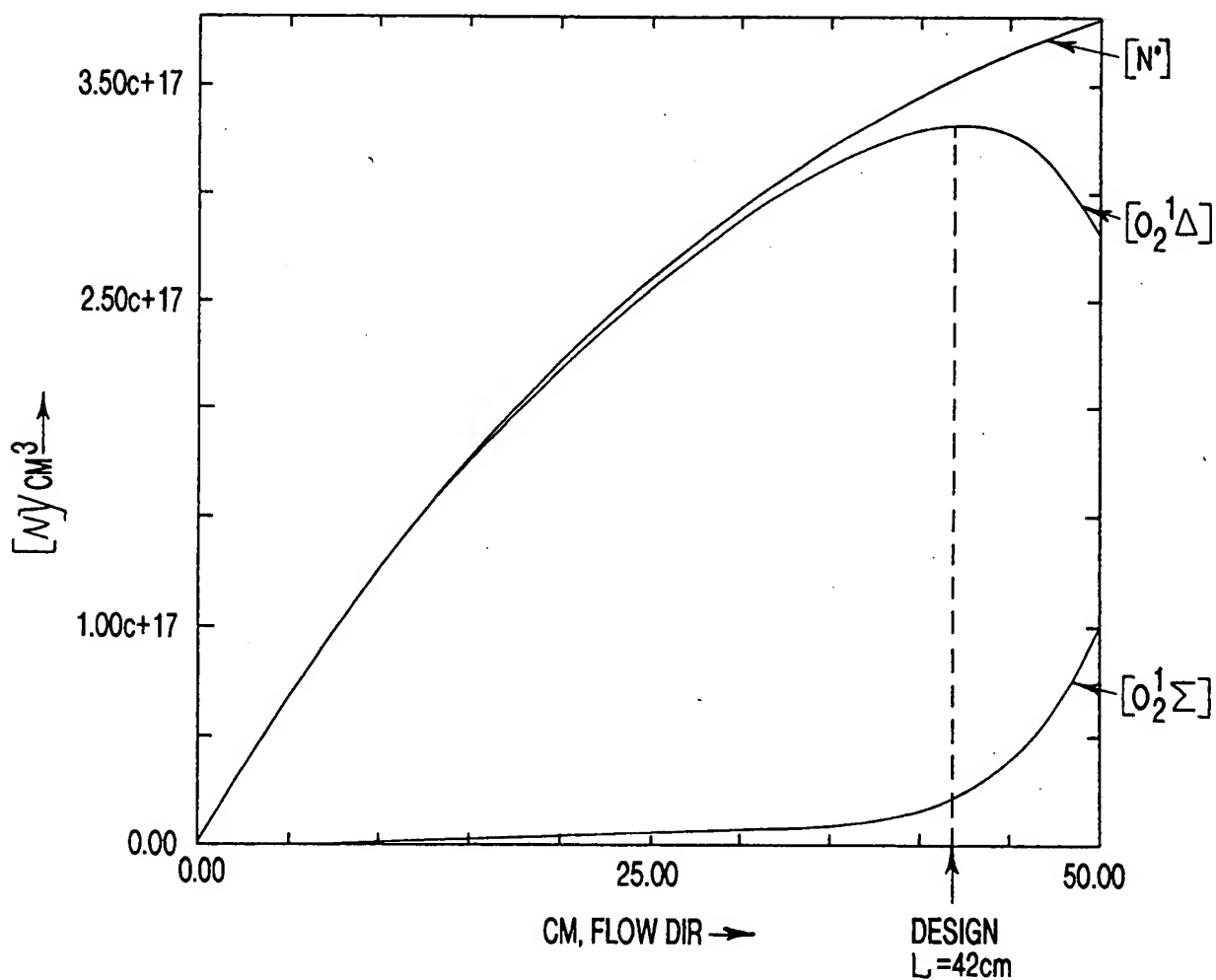


FIG-6b



FLUTED 6480 SECTION LINEAR GENERATOR - $T_{\text{gas}} = 485^\circ\text{K}$,
 $V = 213\text{M/sec (700FT/sec)}$; $P = 75\text{ Torr O}_2 + 75\text{ Torr He}$; $\delta P = 20\text{ Torr}$
 $(E/N)_{\text{PUMP}} = 10\text{Td, CONSTANT}$.



$0.00 < x < 50.00$
 $0.00 < y < 3.81\text{c}+17$

fract $O_2^1\Delta/N_{\text{TOTAL}} = 0.222$
fract $O_2^1\Delta/O_2 \text{ GND} = 0.290$
fract $O_2^1\Sigma/N_{\text{TOTAL}} = 0.014$

FIG-7

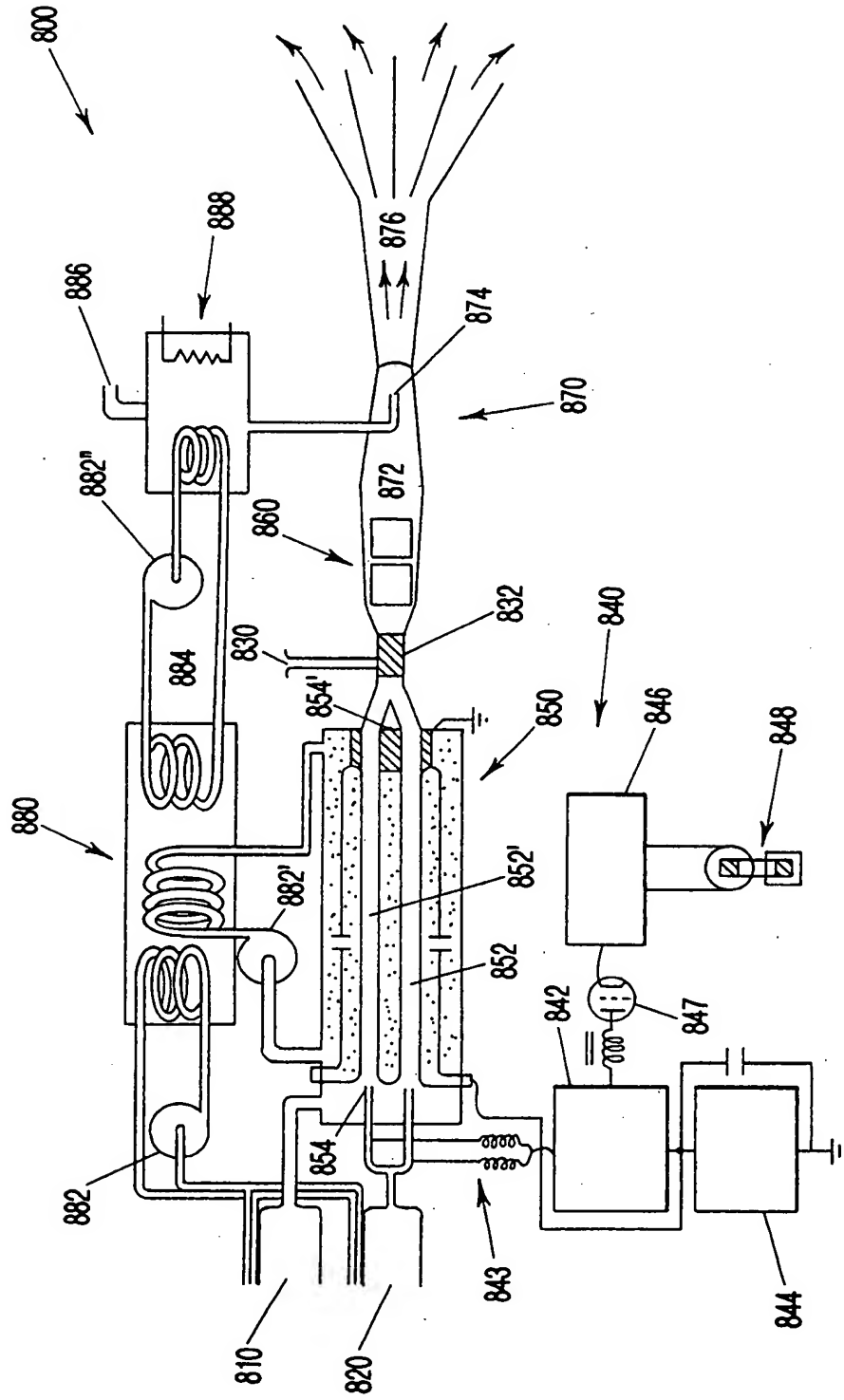


FIG-8a

10086030 022702

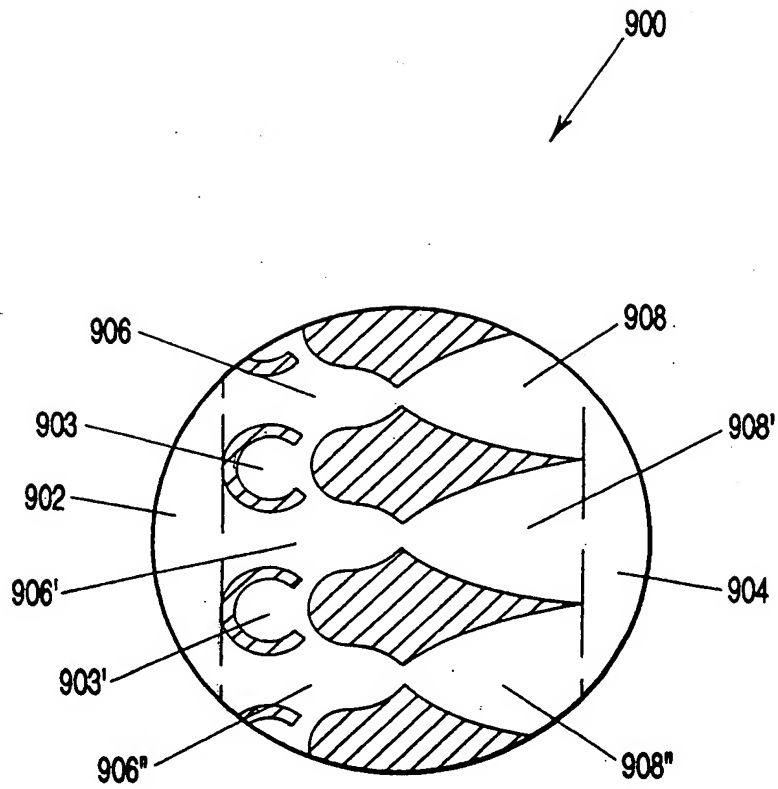


FIG-8b

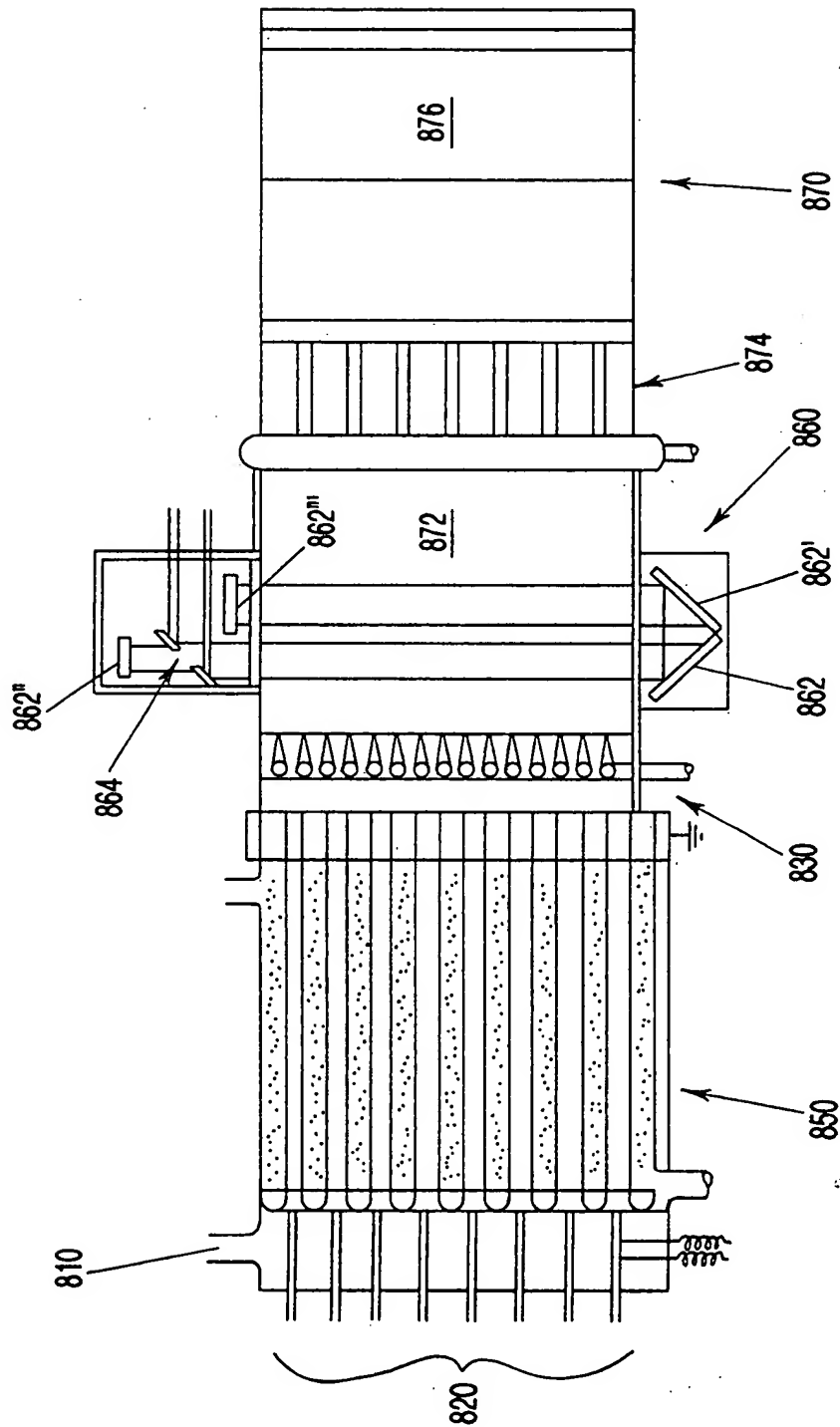


FIG-8c

10086030-022703

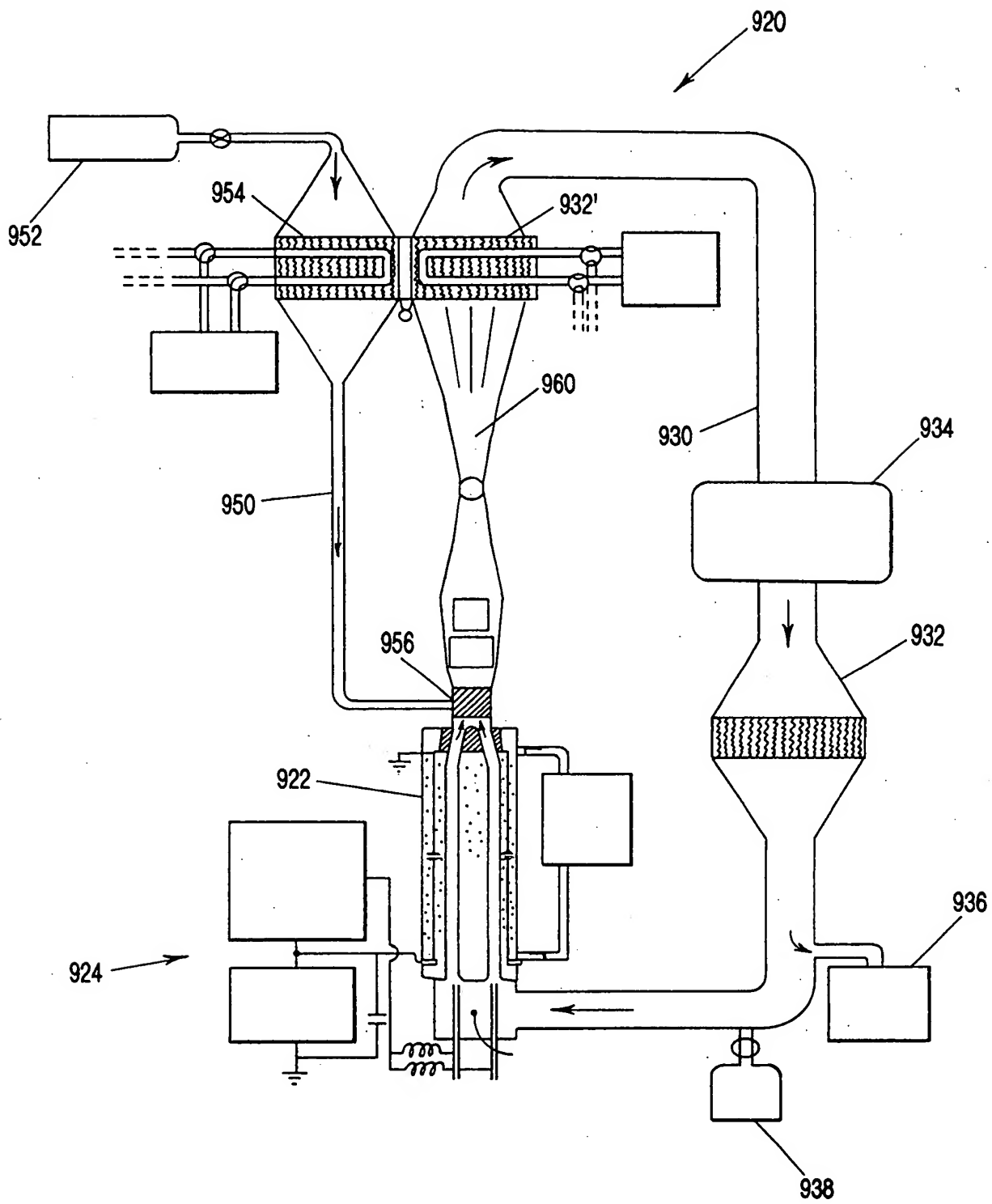
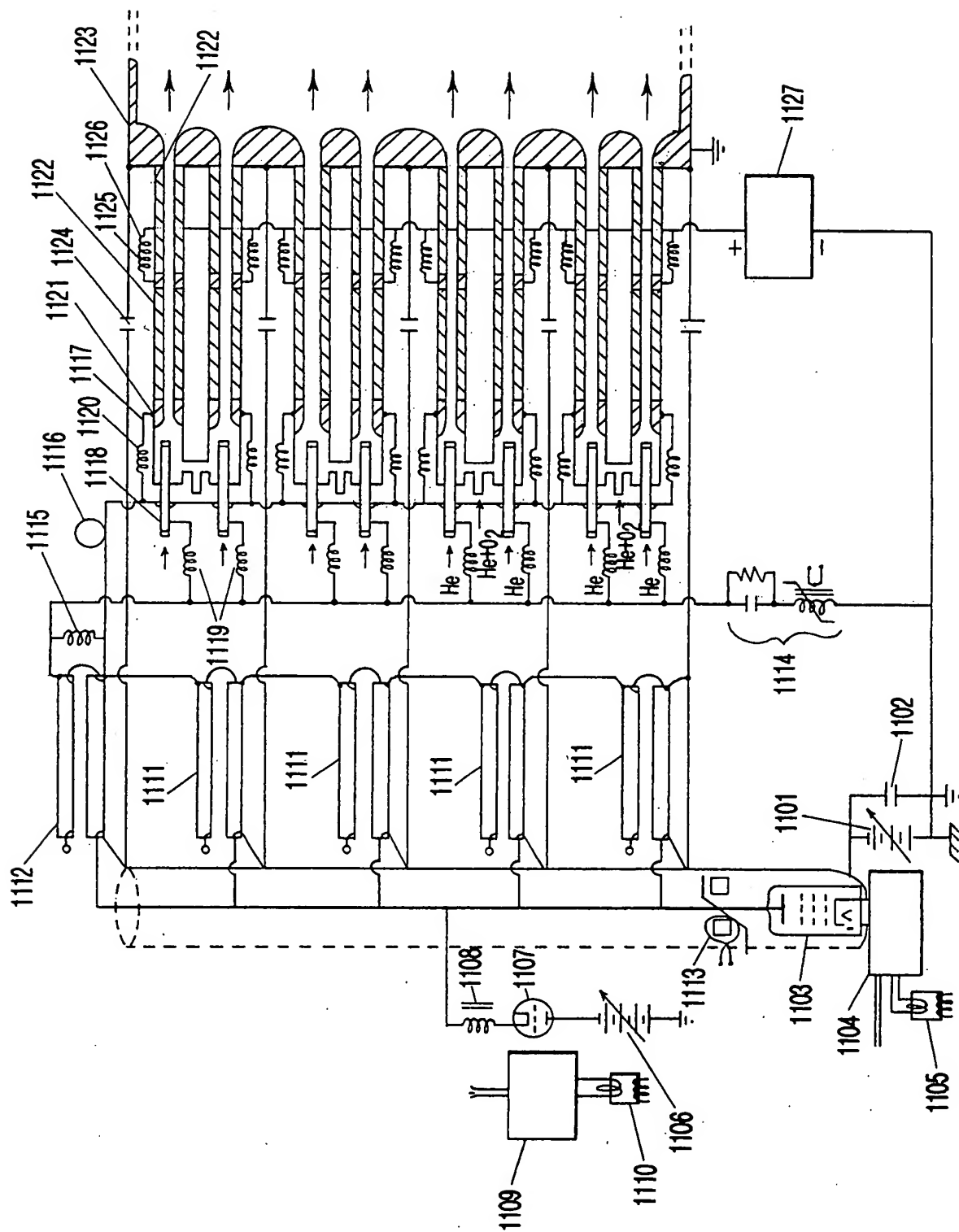


FIG-9



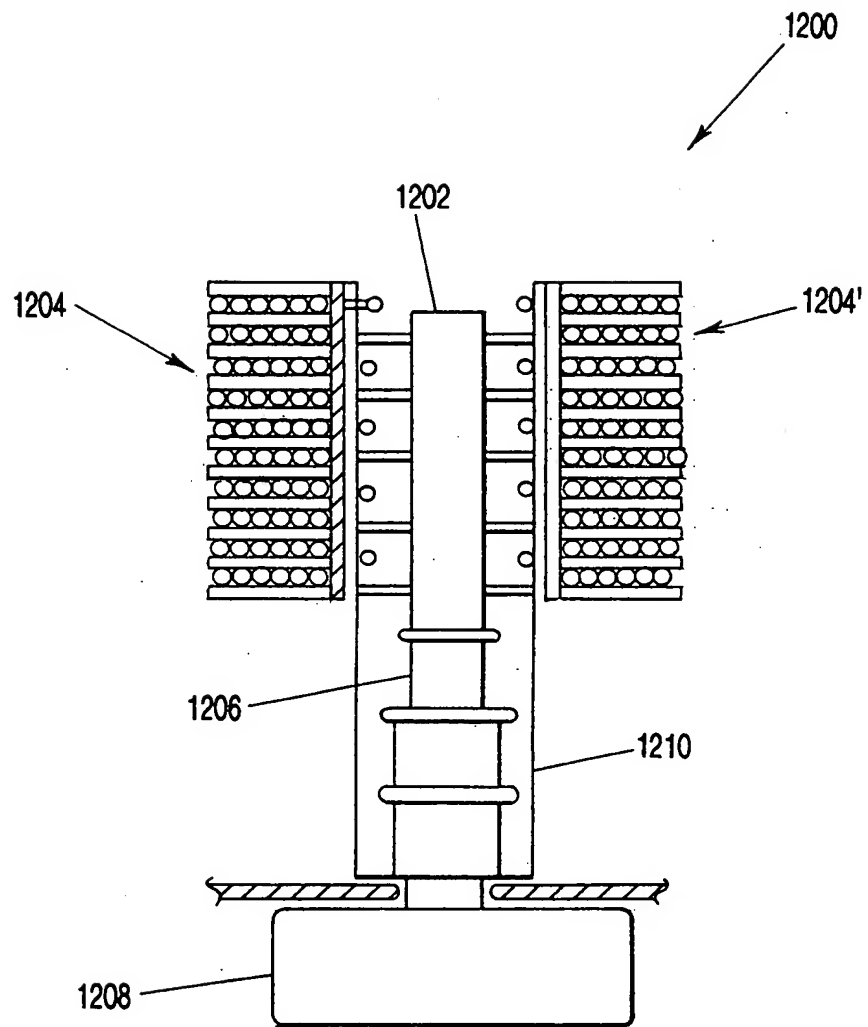


FIG-11

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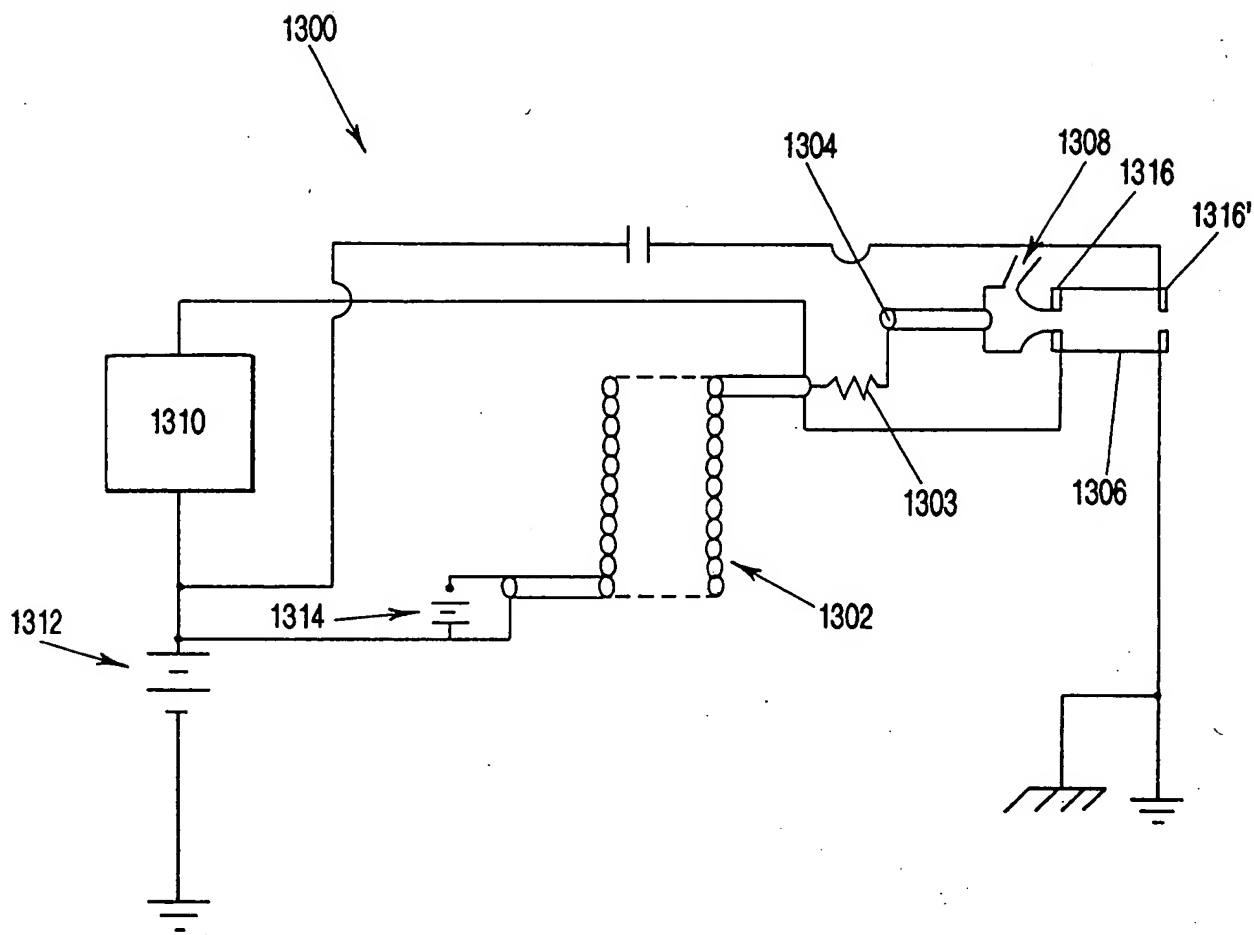


FIG-12

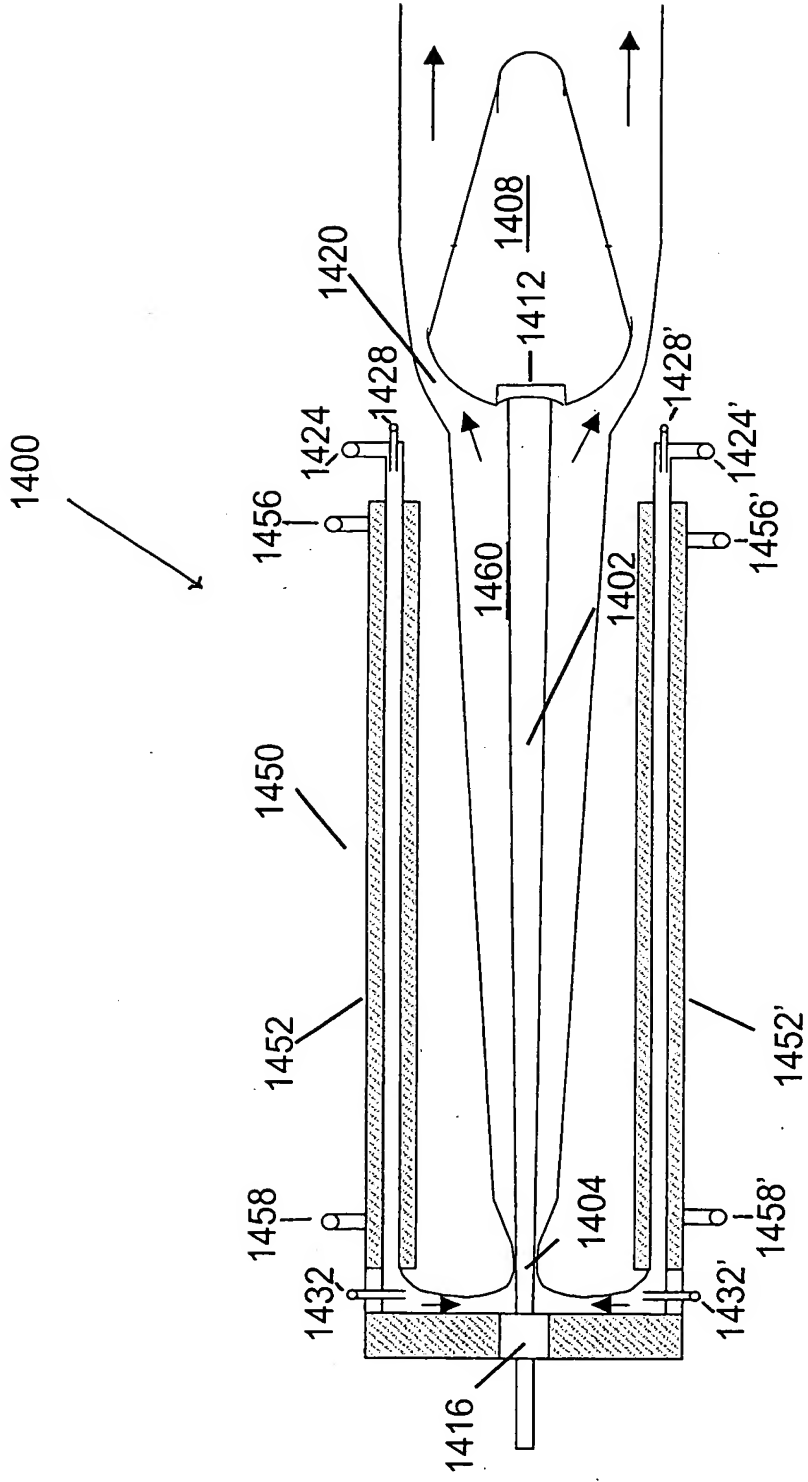


Figure 13

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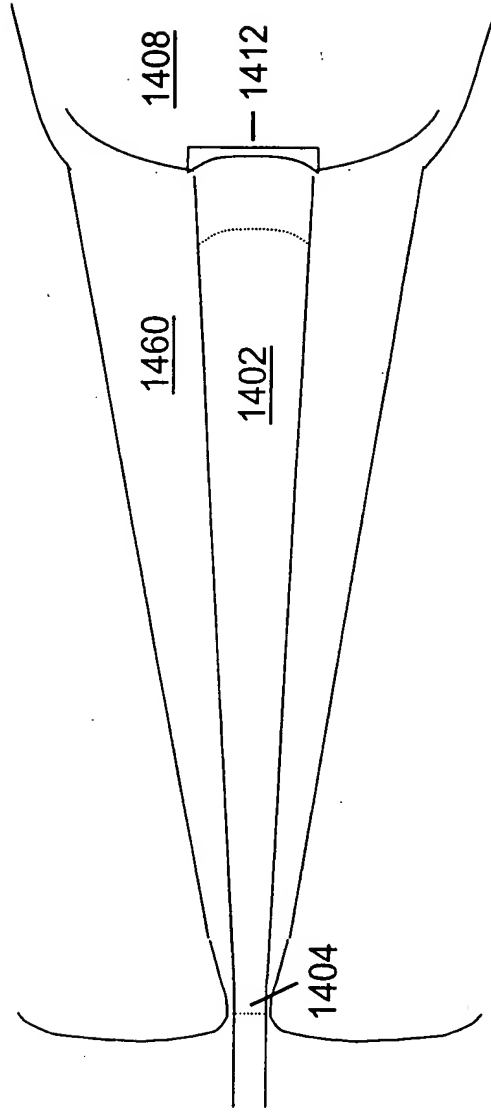


Figure 14